



Sold & Serviced By:

MANUFACTURERS MARKETING, INC.

32 Commerce Street

Springfield, New Jersey 07081

Code 201-376-5148

DESCRIPTION

Remanco has developed a line of solid state frequency multipliers employing varactor diodes.

Solid state harmonic generators offer the advantages of greater stability, smaller size and lighter weight when compared to other schemes of generating low power microwave signals.

Typical efficiencies of frequency doublers are 80%, triplers 75%, quadruplers 50% and quintuplers 25%. Spurious frequencies are down greater than 20 db for all types. Remanco series VM Frequency Multipliers cover from 70 mc to 6 gc.

Bandwidths obtainable are from 1% to 10% of the output frequency for all types. For bandwidths over 5%, the efficiencies will be lower than listed above. The units are designed for 50 ohms input and output impedance. Coaxial type connectors N, BNC, or TNC can be provided.

MULTIPLIER CHAINS

Complete multiplier chains can be made using a number of individual multipliers. A typical example is found in the Remanco Model SG-500 telemetry test set. In this case, a 104 mc signal at 2 watts is multiplied up to give 300 mw at 5 KMC. Three individual multipliers, VM1-4-416, VM2-3-1250, and VM4-4-5000 form the chain. Remanco will custom design multiplier chains for specific requirements. Consult the factory or the local Remanco representative.

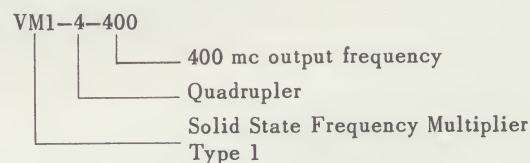
ORDERING INFORMATION

The individual multipliers are designated either Type 1, 2, 3 or 4.

TYPE	INPUT FREQ.	OUTPUT FREQ.	SIZE
VM 1	70-350 mc	140-800 mc	4.5" x 3" x 2½"
VM 2	300-800 mc	770-1.6 gc	4.5" x 3" x 2½"
VM 3	300-800 mc	1.5 gc - 3.5 gc	4.5" x 3" x 2½"
VM 4	1 gc - 1.5 gc	3 gc - 6 gc	3.25" x 2.4" x 2½"

The model number of an individual multiplier is derived by using the type number, the order of the multiplier, and the output frequency in megacycles. The input and output power requirements should be specified as well as the type of R.F. connectors desired. A DC bias voltage is required to operate the multipliers; typically, -25 to -60V at 1 ma. The voltage available should be specified when ordering.

Example:



Specify: RF Input power
RF Output power
RF connectors
Bias voltage available.

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Data subject to change without notice.

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